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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,750	08/18/2003	Wayne M. Struble	TRQ-00002	4139

22888 7590 09/26/2006

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EXAMINER

VO, NGUYEN THANH

ART UNIT	PAPER NUMBER
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2618

DATE MAILED: 09/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/643,750

**Applicant(s)**

STRUBLE, WAYNE M.

**Examiner**

Nguyen T. Vo

**Art Unit**

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 11-19 and 21 is/are rejected.
- 7) ☒ Claim(s) 6 and 8-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Since applicant fails to address this issue in his response filed on July 17<sup>th</sup>, 2006, this comment is now repeated.***

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 14, the recitation "the second diode" lacks clear antecedent basis. It is suggested that claim 14 should depend on claim 4 instead of claim 3.

***Since applicant fails to address this issue in his response filed on July 17<sup>th</sup>, 2006, this rejection is now repeated.***

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5, 7, 11-19, 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Zametzer (5,220,679, cited by examiner).

As to claims 1, 16, 21, Zametzer discloses in figure 2 a switch system comprising a radio frequency switch element 8 configured to receive a radio frequency (RF) input signal (see column 3 lines 51-59); a first voltage supply terminal configured to receive a first DC supply voltage (see the reference potential which is ground in figure 2); a boost circuit 16 configured to receive the RF input signal and the first DC supply voltage and in response, provide a bias voltage for controlling the switch element (see the controller 22). See column 5 line 34 to column 6 line 24.

Still as to claims 1, 16, 21, Zametzer further discloses that the DC output voltage is greater than the first DC supply voltage as claimed because the output 17 UDC in figure 2 (the DC output voltage as claimed) is greater than the ground potential (the first DC voltage as claimed).

Still as to claims 1, 16, Zametzer further discloses that the DC output voltage allows the RF input signal to be routed through the switch element 8 (see column 3 lines 44-59 which clearly states that the received RF input signal is routed through the switch element 8).

As to claim 2, Zametzer discloses a first capacitor C4, a rectifier circuit as claimed (see numerals V3-V4, C5, R3).

As to claim 3, Zametzer discloses a first diode V3 and a first resistor R3 as claimed.

As to claim 4, Zametzer discloses a second diode V4 and a second resistor R1 as claimed.

As to claims 5, 7, see capacitor C5. See also C6 in figure 1.

As to claims 11-12, see the connection of diode V3 and C4 in figure 2.

As to claims 13-14, see the connection of diode V3 and C4 and connection of diode V4 and R1 in figure 2.

As to claim 15, see the reference potential which is ground in figure 2 of Zametzer.

As to claims 17-18, first of all, Zametzer does disclose a first capacitor C4 and a second capacitor (see C5-C8) and a first DC supply voltage (see the ground potential in figure 2). In addition, since the basis function of the capacitors Zametzer is charging and discharging, Zametzer discloses the claimed limitations.

As to claim 19, first of all, Zametzer does disclose a second capacitor (see C5-C8) and a second DC supply voltage (see terminal 20 in figure 2 which receives voltage UDC/3). In addition, since the basis function of the capacitors Zametzer is charging and discharging, Zametzer discloses the claimed limitations.

***Allowable Subject Matter***

6. Claims 6, 8-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claims 6, 8, the applied references fail to disclose or render obvious a first node and a third resistor as specified in the claim.

As to claim 9, the applied references fail to disclose or render obvious a second capacitor and a third resistor as specified in the claim.

As to claim 10, the applied references fail to disclose or render obvious a third resistor as specified in the claim.

### ***Response to Arguments***

7. Applicant's arguments filed July 17<sup>th</sup>, 2006 have been fully considered but they are not persuasive.

#### **Rejections of claims 1-5, 7 and 11-20 based on Zametzer**

Applicant argues that Zametzer fails to disclose that the DC output voltage allows the RF input signal to be routed through the switch element. The examiner, however, disagrees. Zametzer at column 3 lines 44-59 clearly discloses that the received RF input signal is routed through the switch element 8.

Applicant further argues that Zametzer fails to disclose that the DC output voltage is greater than the first DC supply voltage. The examiner, however, disagrees. Zametzer discloses that the output 17 UDC in figure 2 (the DC output voltage as claimed) is greater than the ground potential (the first DC voltage as claimed).

#### **Rejections of claims 1-3, 11 and 16 based on Miyatsuji**

The rejection to claims over Miyatsuji as set forth in the previous action is now withdrawn. Accordingly, applicant's arguments are moot.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen T. Vo whose telephone number is (571) 272-7901. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571)272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Nguyen Vo

Nguyen Vo  
9-22-2006

**NGUYEN T. VO**  
**PRIMARY EXAMINER**